NREPP SAMHSA's National Registry of
Evidence-based Programs and Practices

Comparative Effectiveness Research Series

Motivational Interviewing

An Informational Resource

2012

This document is part of a series discussing evidence-based practices (EBPs) evaluated in comparative effectiveness research studies. The information is designed to inform practitioners and other decisionmakers considering the adoption of EBPs in their organization. This document in the series provides general information about Motivational Interviewing (MI), along with results of studies assessing MI's efficacy, details about cost, and examples of MI-based interventions for implementation in primary care and behavioral health settings. The decision to adopt and implement EBPs is guided by many factors that may not be covered here. The authors hope this information can assist in making an informed decision on the implementation of this treatment model.

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Motivational Interviewing

Motivational Interviewing (MI) is an approach used by health professionals to help clients change unhealthy behavior. Health professionals using MI are guided by a four-process model that involves engaging, focusing, evoking, and planning, with the goal of guiding and strengthening an individual's motivation for change.[2] The approach can be successfully adapted for use with adults, adolescents, or children in the treatment of mental and substance abuse disorders. It can also be used in the prevention of chronic diseases, in medication management, and in other aspects of behavioral health.

> MI was developed by William Miller from his work with problem drinkers. It has been elaborated upon by Miller and Stephen Rollnick as a collaborative, person-centered form of guidance to elicit and strengthen motivation for change.[1]

Over the past 25 years, MI has been evaluated in comparative effectiveness research (CER) trials, systematic reviews, and outcome studies published in hundreds of peer-reviewed publications. MI is included in several evidence-based program registries and recognized as an effective model for the treatment of behavioral and addiction disorders. Research supports its effectiveness with results that are generalizable to different populations, communities, and settings.

The Practice of MI

Health providers who learn the MI approach can use the skills flexibly in their work with clients. MI is sometimes used as a discrete portion of a session or sessions, and sometimes the health provider moves in and out of the style according to the client's situation. MI is a style that is consistent with other therapeutic models (e.g., client-centered) to address ambivalence about change. MI approaches are effective in helping clients move through the stages of readiness for change to increase their belief in their ability to maintain behavior change (self-efficacy). A provider using the MI approach is viewed as a partner in interactions with the client and does not act as "the only expert in the room."

The Spirit of MI

The MI approach is not a set of techniques or strategies but rather a style of relating to clients. Although some consider the practice of MI as a "way of being with people," it is a collaborative—rather than a prescriptive—treatment approach to elicit the client's own intrinsic motivation and resources for change. Health professionals employ communication skills that are consistent with the spirit of MI to enhance their interaction with their clients.

These communication skills can be remembered by using the acronym **OARS.**[2]

O   **Open-ended questions**—asking the client to talk about what is important to him or her, rather than closed-ended questions asking the client to talk about what is important to the health professional

A   **Affirmations**—helping the client remind himself or herself of strengths and abilities that might make change more possible

R   **Reflective listening**—selectively calling attention to those parts of the client's experience that might be consistent with the change by demonstrating that the health professional is paying attention

S   **Summaries**—helping the client notice his or her statements and experiences that are consistent with the change

Core Components and Understanding the MI Approach

Four sequential processes guide MI[2] as follows:

1. Engage the client.
   - Establish a helpful connection between provider and client.
   - Practice reflective listening and use interviewing skills.
   - Explore discrepancy between the client's behaviors and core values and goals.

2. Focus to seek and maintain direction.
   - This is a continuing rather than a one-time process.
   - Find one or more specific goals that provide direction for consultation.
   - Elicit information from the client before providing information.

3. Evoke the decision to change.
   - Strengthen the client's motivation for change.
   - Recognize the client's balance of change talk and sustain talk.
   - Explore ambivalence by facilitating discrepancy.

4. Plan how to bring about change.

  ▶ Assess the client's level of readiness for change.

  ▶ Proceed with change planning only after the client is ready.

  ▶ Develop a change plan and revisit the planning process from time to time to make adjustments as needed.

The MI approach is different from most styles commonly used in the health care field to encourage behavior change. The examples below illustrate how the MI approach is different in motivating change.

Table 1. Examples of the MI Approach

Instead of This	MI Approach
Explaining why the client should carry out a health-promoting behavior	Listening with the goal of understanding the client's dilemma of carrying out the health-promoting behavior
Teaching the client, telling the client what to do, or giving advice	Asking what the client knows, then providing some information or advice, and then asking how that fits with his/her life
Describing specific benefits that would result from carrying out the health-promoting behavior	Asking: What might be the benefit of carrying out this health-promoting behavior?
Telling the client how to carry out a health-promoting behavior	Asking: What are you already doing that would make it possible for you to carry out this health-promoting behavior? How might you carry out this health-promoting behavior so it fits in your life?
Emphasizing how important it is for the client to carry out the health-promoting behavior	Asking: Why is it important to you to think about or carry out this health-promoting behavior?
Telling or inspiring the client to carry out the health-promoting behavior	Asking: Why would you want to enhance your health?

Eliciting Change Talk

The provider can use strategies such as open-ended questions to elicit "change talk" from clients. For example, the provider may use an importance ruler[2] to assess the client's perceived importance on an imaginary scale: "On a scale from 0 to 10, 0 being not important and 10 being very important, how important is this to you?" A followup question explores the discrepancy between the number chosen and a lower number on the scale: "Why are you at 4 and not 0?" The client's response is likely to include change talk; that is, the reasons why change is important. More examples are available on the MINT Web site (http://www.motivationalinterviewing.org) through downloadable worksheets, videos, and curricula to support staff training and increase provider skills.

What the Evidence Tells Us About MI's Effectiveness

Comparative Effectiveness Research and Systematic Reviews

MI is an evidence-based practice (EBP) because it has been scientifically evaluated, proven to be effective, and recognized by Federal registries and other organizations as an EBP. The effectiveness of MI has been evaluated in over 200 studies including CER. CER studies compare the benefits and harms of different interventions and strategies to prevent, diagnose, treat, and monitor community health and the nation's health care system. The Agency for Healthcare Research and Quality defines CER as a way to develop, expand, and use a variety of data sources and methods to conduct research and disseminate results in a form that is quickly usable by clinicians, clients, policymakers, and health plans and other payers.[3] MI or adaptations of MI (AMI) have been evaluated in the treatment of substance abuse, mental and behavioral health, and other medical disorders in the following types of CER studies:[4]

> ▸ MI/AMI versus specified treatment
>
> ▸ MI/AMI versus (defined) treatment as usual
>
> ▸ MI/AMI as an add-on to a specified treatment
>
> ▸ MI/AMI as an add-on to (defined) treatment as usual

CER provides essential information aiding health care providers and their clients in decisions on the most appropriate treatment.

Over the past 10 years, more than a dozen systematic reviews and meta-analyses have been conducted and published evaluating the effectiveness of MI. Notably, these systematic reviews report that the external validity of the included studies is generally high because the studies were conducted in the same clinical settings as those that offer services to the public.[4] Studies of MI show positive effects and treatment retention. A meta-analysis[5] of 72 studies comparing MI to other treatments for 10 different areas—alcohol use, drug use, smoking, HIV risk, treatment compliance, diet and exercise, water purification, gambling, eating disorders, and relationships—identified the following:

> ▸ MI was more effective than the comparison intervention in 38 of the 72 studies.
>
> ▸ MI treatment effects can emerge quickly—within a few weeks.
>
> ▸ The strongest evidence was found for substance abuse, with effects persisting over time when MI is used as an additive to another treatment.
>
> ▸ Significant effect sizes were also found for HIV risk, alcohol use, diet and exercise programs, and treatment adherence.
>
> ▸ Provider type did not predict effectiveness in MI.
>
> ▸ MI increases treatment adherence and treatment retention.

MI Adaptations for Implementation in Real-World Settings

As a therapeutic style focused more on client-counselor interactions than on a specific step-by-step treatment protocol, MI lends itself to application in a wide range of settings and by a variety of health professionals. MI-based approaches are used in outpatient, inpatient, primary care, educational, correctional, and other community settings, and they can be delivered in individual counseling sessions, group counseling, and even by telephone. MI-based interventions have been used to address mental health and substance abuse issues; deal with diet and nutrition challenges; treat tobacco use; increase physical activity; and prevent or improve treatment adherence for medical conditions such as diabetes, hypertension, and obesity. MI-based interventions have also been culturally tailored and used with specific populations such as children, parents, psychiatric patients, prisoners, and college students.

Examples of Interventions Using MI

▸ *Motivational Enhancement Therapy* (MET) is a combination of MI and personal assessment feedback for the treatment of adolescents and adults with alcohol and/or other drug use disorders, including co-occurring disorders. MET has been shown to support reductions in alcohol and other drug use, drinking intensity, and other drug-related problems, including legal, occupational, psychological, and social consequences of use.[6]

▸ *The Eat for Life* program is a community-based program implemented in churches that uses MI to encourage fruit and vegetable intake among African Americans. Program participants receive culturally tailored intervention materials including an *Eat for Life* cookbook and an educational videotape. They also receive three telephone calls that use MI techniques to motivate behavior change. In the relevant study, people receiving the educational materials and the three MI calls increased their daily consumption of fruit and vegetables from baseline at the 1-year followup.[7]

▸ *Telephone Monitoring and Adaptive Counseling* (TMAC) is a telephone-based continuing care intervention for clients who have completed a residential treatment program or an intensive outpatient program for substance use disorders. TMAC is a manual-driven integrated treatment model of MI and cognitive behavioral therapy (CBT). TMAC combines low-intensity monitoring, social support, and adaptive levels of MI counseling and CBT. Clients receiving TMAC reported higher alcohol and cocaine abstinence rates and reduction in cocaine and alcohol use.[8]

> **MI can be delivered by practitioners from a variety of disciplines such as outreach workers, psychologists, therapists, counselors, nurses, and others.**

▸ The *High Impact Therapy for Pregnant Smokers* intervention is designed to help pregnant women recognize the links between smoking behavior and mood and relational issues. Mental health counselors use an MI style of counseling to teach coping strategies to prevent relapse. Counseling sessions take place after the initial prenatal visit and are followed by bimonthly telephone calls from the counselor during pregnancy and monthly telephone calls for the first 6 months after delivery. Program participants assigned to this program reported higher smoking abstinence rates at the end of pregnancy compared with nonprogram participants.[9]

Organizational Readiness To Adopt MI

There are several factors to consider when an organization is deciding whether to adopt a new practice. The Institute of Behavioral Research at Texas Christian University (TCU)[10] has identified five broad categories of organizational readiness for change based on extensive research findings related to technology transfer and the adoption of EBPs (http://www.ibr.tcu.edu/evidence/evi-orc.html). These include—

Did You Know…?

The MI Web site contains an assortment of resources to help integrate MI into your agency.

▸ Motivational readiness: program needs, training needs, and pressures for change

▸ Institutional resources: offices, staffing, training, and equipment

▸ Staff attributes: growth, efficacy, influence, adaptability, and orientation

▸ Organizational climate: clarity of mission and goals, cohesion, autonomy, openness to communication, stress, and openness to change

▸ Costs: cost of materials, training, supervision, and loss of billable hours associated with training and supervision; reimbursement practices

Table 2 provides some—but not all—questions to consider when deciding whether to adopt MI. Factors specific to an organization, especially those that might present barriers, should also be considered.

Table 2. What To Consider When Deciding Whether To Adopt MI

Organizational Readiness Domain	Questions To Consider
Motivational Readiness	▪ Do practitioners and leadership recognize the need for MI within the organization? ▪ Do practitioners and leadership in our program agree with the rationale for using MI? ▪ Are supervisors clear about how MI will benefit clients? ▪ Do staff who will be affected by MI know changes are coming and are prepared to offer feedback for its success? ▪ Are supervisors prepared to learn about MI through training, careful study of literature, and consultation with experts? ▪ Has input been collected from key stakeholders who might be affected by MI?
Institutional Resources	▪ Are there seasoned professionals on staff for practitioners to seek support, consultation, and guidance? ▪ Does our program currently provide case-specific, clinical supervision (as opposed to administrative supervision) for our clinicians? ▪ Is weekly 1-hour clinical supervision the norm for new treatments implemented in our program? ▪ Are internal and/or external "champions" or "cheerleaders" in place to support implementation of MI? ▪ Are the components of MI consistent with ongoing practices in our program? ▪ Do our clinicians and supervisors have access to resources for learning and receiving feedback about MI?
Staff Attributes	▪ Are staff generally willing to try new ideas/practices? ▪ Do staff regularly seek new information to keep skills current? ▪ Do staff have the skills necessary to implement MI?
Organizational Climate	▪ Do program and clinical leadership actively support the adoption of MI? ▪ Does our program have a tradition of learning and changing to avoid becoming entrenched in the status quo? ▪ Are supervisors, clinicians, and staff generally positive about changes in practice, especially when they can see how they will benefit the clients? ▪ Does our organization traditionally provide ongoing learning opportunities and consultation for clinicians learning a new practice?
Costs	▪ Can caseload and direct-care hours be adjusted in response to the requirements of MI? ▪ Do current reimbursement mechanisms cover MI? ▪ Do practitioners have adequate time to formally learn about MI?

* Questions adapted from the TCU Organizational Readiness for Change Survey and the Organizational Readiness and Capacity Assessment

Dissemination and Implementation Resources

The main vehicle for dissemination is the MINT Web site (http://www.motivationalinterviewing.org). Those interested in learning more about MI can readily access the basic theoretical and conceptual underpinnings of the practice, descriptions of practice techniques, literature on MI for various settings and populations, and an assortment of didactic resources.

Implementation Materials

The primary resource for details on using MI is *Motivational Interviewing: Helping People Change* (3rd ed.), available through a variety of booksellers. This text is intended to serve as a general reference guide for implementers of MI, providing a thorough explanation of the MI framework, processes, glossary of MI terms, case examples, and discussions on the evidence base.

Supplemental texts for adapting MI to specific settings and populations may be found on the MINT Web site, including the following:

▶ *Motivational Interviewing in Health Care: Helping Patients Change Behavior*

▶ *Motivational Interviewing With Adolescents and Young Adults*

▶ *Building Motivational Interviewing Skills: A Practitioner Workbook*

▶ *Motivational Interviewing in the Treatment of Psychological Problems*

▶ *Motivational Interviewing in Social Work Practice*

Training Resources for Providers

▶ Online training courses on the foundations of MI are also available on the MINT Web site. The self-paced, two-course online sequence is completed over 4 weeks, enabling busy providers to work as convenient.

▶ Onsite training workshops are led by members of MINT who have completed a training of new trainers led by the MI developers and their representatives. Typical training length varies from 1 to 5 days, depending on the particular trainer and topics covered. Trainings accommodate a range of skill levels, with specific workshops targeting beginners, advanced practitioners, and supervisors of MI practice. Training content is not standardized, so materials distributed and activities completed during trainings vary. However, trainings typically include various types of pedagogy to build practice skills, including but not limited to traditional lecture and role-play.

- ▸ Intermediate and advanced clinical training through session audiotape or videotape reviews and ongoing onsite training and supervision help ensure the best implementation and sustainability of MI.

- ▸ A list of MI trainers is available on the MINT Web site.

Quality Assurance Tools

MI *Supervisor and Coding Trainings* to monitor fidelity are available on the MINT Web site. Tools developed and disseminated by the University of New Mexico Center on Alcoholism, Substance Abuse, and Addictions (CASAA) to measure training, assess clinician adherence, and assess process change are available on the CASAA Web site (http://casaa.unm.edu/codinginst.html).[11] Some of these tools include—

- ▸ *Motivational Interviewing Treatment Integrity (MITI)* is a coding system that assesses how well a clinician adheres to the intended practice of MI by tracking instances of particular MI-adherent and MI-nonadherent clinician behaviors.

- ▸ *Manual for the Motivational Interviewing Skills Code 2.1(MISC)* is an instrument designed to evaluate the quality of MI in the therapy session; it examines provider adherence and provider skills after training and can be used as a feedback tool to improve skills.

- ▸ *The Sequential Code for Observing Process Changes (SCOPE)* is a coding system to assess the relationship between the MI counselor's behavior and client responses during the MI session.

Resources for Agency Directors

The decision to adopt and implement MI in an agency or practice can be challenging without the appropriate level of knowledge and support. Resources on the MINT Web site[1] are available to assist agency directors to integrate evidence-based programs into routine practice. Two of these resources include (1) a presentation by the Addictions Technology Transfer Center Network on implementing EBPs (http://www.nattc.org/explore/priorityareas/techtrans/utilizingattcmodel/agencydirectors/) and (2) the *Change Book* and *Workbook*, tools designed for agency directors to help them understand the technology transfer process from scientific implementation to real-world implementation. These tools are available at http://www.motivationalinterview.org/treatment_directors/treatment_directors.html

Costs

Table 3 outlines the costs related to specific dissemination components. Implementation costs vary depending on specific needs. Refer to the MINT Web site for information on training costs.

Table 3. Dissemination Component Costs

Item	Cost
Motivational Interviewing: Helping People Change (3rd ed.)	$51 each
Supplemental materials	Free online at http://www.motivationalinterviewing.org
Assorted training videos	Vary and start at $25 each
Assorted practitioner trainings	Cost varies, depending on training type, level, location, number of participants, and trainer selected
Quality assurance tools	Free online at http://casaa.unm.edu/codinginst.html

References Cited

[1]Motivational Interviewing Network of Trainers (MINT) Web site
www.motivationalinterviewing.org

[2]Miller, W. R., & Rollnick, S. (2013). *Motivational interviewing: Helping people change*. (3rd ed.). NY: Guilford Press.

[3]Agency for Healthcare Research and Quality. (n.d.). *What is comparative effectiveness research?* Retrieved from http://www.effectivehealthcare.ahrq.gov/index.cfm/what-is-comparative-effectiveness-research1

[4]Miller, W. R., & Rollnick, S. (2002). *Motivational interviewing: Preparing people for change*. (2nd ed.). NY: Guilford Press.

[5]Hettema, J., Steele, J., & Miller, W. R. (2005). Motivational interviewing. *Annual Review of Clinical Psychology, 1*, 91–111.

[6]Substance Abuse and Mental Health Services Administration. (2008, January). *Motivational enhancement therapy*. Retrieved from the National Registry of Evidence-based Programs and Practices, http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=107

[7]*Eat for Life.* Research-Tested Interventions Programs Web site. National Cancer Institute and Substance Abuse and Mental Health Services Administration. Retrieved from http://rtips.cancer.gov/rtips/programDetails.do?programId=224488

[8]Substance Abuse and Mental Health Services Administration. (2010, December). *Telephone Monitoring and Adaptive Counseling (TMAC).* Retrieved from the National Registry of Evidence-based Programs and Practices, http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=173

[9]National Cancer Institute and Substance Abuse and Mental Health Services Administration. *High impact therapy for pregnant smokers.* Research-tested Interventions Programs Web site. Retrieved from http://rtips.cancer.gov/rtips/programDetails.do?programId=312134

[10]Texas Christian University, Institute of Behavioral Research. (2005). *The organizational readiness for change: Treatment staff version (TCU ORC-S).* Retrieved from www.ibr.tcu.edu

[11]The University of New Mexico, Center on Alcoholism, Substance Abuse, and Addictions. *Coding instruments.* (2012). Retrieved from http://casaa.unm.edu/codinginst.html

Other References

Addiction Technology Transfer Center Network. (n.d.). *Implementing evidence-based practices.* Retrieved from http://www.nattc.org/explore/priorityareas/techtrans/

Substance Abuse and Mental Health Services Administration. (2008, April). *Motivational interviewing.* Retrieved from the National Registry of Evidence-based Programs and Practices, http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=130

Glossary

Adaptation: A modest to significant modification of an intervention to meet the needs of different people, situations, or settings.

AMI (Adaptation of Motivational Interviewing): An intervention that incorporates non-MI techniques while retaining MI principles as the core treatment.

CER (comparative effectiveness research): The Federal Coordinating Council on Comparative Effectiveness Research defines CER, in part, as the conduct and synthesis of research comparing the benefits and harms of different interventions and strategies (e.g., medications, procedures, medical and assistive devices and technologies, diagnostic testing, behavioral change, delivery system strategies) to prevent, diagnose, treat, and monitor health conditions in real-world settings.

Comparison group: A group of individuals that serves as the basis for comparison when assessing the effects of an intervention on a treatment group. A comparison group typically receives some treatment other than what they would normally receive and is therefore distinguished from a control group, which often receives no treatment or "usual" treatment. To make the comparison valid, the composition and characteristics of the comparison group should resemble the treatment group as closely as possible. Some studies use a control group in addition to a comparison group.

Core components: These refer to the most essential and indispensable components of an intervention (core intervention components) or the most essential and indispensable components of an implementation program (core implementation components).

Dissemination: The targeted distribution of program information and materials to a specific audience. The intent is to spread knowledge about the program and encourage its use.

EBPs (evidence-based practices): Programs or practices that effectively integrate the best research evidence with clinical expertise, cultural competence, and the values of the persons receiving the services.

Implementation: The use of a prevention or treatment intervention in a specific community-based or clinical practice setting with a particular target audience.

Intervention: A strategy or approach intended to prevent an undesirable outcome (preventive intervention), promote a desirable outcome (promotion intervention), or alter the course of an existing condition (treatment intervention).

MI (Motivational Interviewing): A collaborative and goal-oriented style of communication designed to strengthen personal motivation and commitment for change by exploring and eliciting the person's own reasons for change in an atmosphere of acceptance and compassion.

MITI (Motivational Interviewing Treatment Integrity): A coding system that assesses how well a clinician adheres to the intended practice of MI.

Additional Resources

The National Registry of Evidence-based Programs and Practices Web site
http://www.nrepp.samhsa.gov

The Motivational Interviewing Assessment: Supervisory Tools for Enhancing Proficiency (MIA:STEP) developed as part of the National Institute on Drug Abuse (NIDA) and Substance Abuse and Mental Health Services Administration (SAMHSA) Blending Initiative. The materials were prepared and produced by the Addiction Technology Transfer Centers funded by SAMHSA and the National Drug Abuse Treatment Clinical Trials Network funded by NIDA:
http://www.attcnetwork.org/explore/priorityareas/science/blendinginitiative/miastep/

Enhancing Motivation for Change in Substance Abuse Treatment, part of the Center for Substance Abuse Treatment's Treatment Improvement Protocol Series, which provides best-practice guidelines for the treatment of substance abuse. http://www.ncbi.nlm.nih.gov/books/NBK14856/

Topic 2: Shoring up Motivation and Commitment to Stop. In *A Cognitive-Behavioral Approach: Treating Cocaine Addiction*, part of the National Institute on Drug Abuse's Therapy Manuals for Drug Addiction. http://archives.drugabuse.gov/TXManuals/CBT/CBT1.html

Project MATCH, supported by the National Institute on Alcohol Abuse and Alcoholism
http://www.commed.uchc.edu/match/

Supplementary Materials for Motivational Interviewing. 3rd ed. http://www.guilford.com/p/miller2

This document may be downloaded from http://nrepp.samhsa.gov